

Regarding broadband over power lines:

Please excuse (and delete) my immediately previous incomplete posting. I unintentionally terminated the comment early by mistakenly hitting the "tab" key.

Placing high bandwidth RF (broadband) onto power lines is like connecting (admittedly low power) transmitters to HUGE antennae. The broadband signal contains components at most all radio frequencies. Thus the background noise level for all radio services will be increased, reducing service levels.

Admittedly, much communication is trending toward cable (TV) and fiber optics (internet backbone) where those mediums are self shielding -- they don't radiate into the common "free space" used by all traditional radio transmitters and receivers.

Traditional telecommunications services which use "free-space" for radio communication will be adversely affected by broadband over power lines due to the "noise" they induce. Low-level signals will be lost to this new noise. In particular, with my long-time experience in amateur radio, I often experience the effects of various types of interference to low level radio signals from many sources, such as from other services, from natural sources such as background noise, distant lightning strikes, old-time Russian HF radar, power line corona discharge, and even static from two powerline support (non power-handling) cables rubbing together.

If this line of thinking does not assure the FCC of the interfering effect of broadband over power lines on "free-space" telecommunication services, a study should be made to measure the radiated signal levels and their effects on the many "free-space" telecommunication services.

Please give very careful consideration to the "noise" generated by broadband over power lines and assure that there will be no interference from such sources. Even though the radiated signal may be small at some distance from the power lines, almost everyone in the US is within a few feet of power lines in every building. In my opinion, any small increase in radiated signal level over the background noise would be sufficient to deny the use of broadband over power lines. After all, one of the tenets of FCC rulings has been the consistent requirement that one service shall not interfere with another.

Sincerely,
Robert Batten
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